

## Claims:

## 1. A rotary engine comprising:

a cylindrical housing (2) having an intake chamber  
5 (32) and an exhaust chamber (34) formed at the inner wall  
thereof, the intake and exhaust chambers being caved in the  
inner wall of the housing;

a guiding member (26) disposed at the center of the  
housing(2), the guiding member (26) being formed in a semi-  
10 elliptical shape at intake and compression sections and in a  
semicircular shape at an exhaust section;

a rotary member (6) disposed in the housing (2) such  
that the rotary member (6) can be rotated along with a  
rotating shaft (4);

15 pistons (12) disposed in a plurality of operating  
chambers (8) formed at the rotary member (6) such that the  
pistons (12) can be rotated about shaft rods (58),  
respectively, each of the pistons (12) having a tail part  
contacting the outer circumference of the guiding member (26);

20 shutoff valves (16) engaged in a guide groove (50)  
formed at the housing (2) through guide rods inserted  
through intake/exhaust ports (14) formed at the operating  
chambers (8) of the rotary member (6);

25 an ignition plug disposed at the inlet of the exhaust  
chamber of the housing or at the intake/exhaust ports of the  
rotary member; and

shutoff plates (18) rotatably disposed at the outsides of the intake/exhaust ports (14) of the rotary member (6), respectively, the shutoff plates (18) being engaged in the guide groove (50) of the housing (2) through guide rods.

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2. The engine as set forth in claim 1, further comprising oil seals (28, 30) surrounding the intake chamber (32) and the exhaust chamber (34) of the housing (2), respectively.

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3. The engine as set forth in claim 2, wherein the oil seals (28, 30) comprise sealing parts (40, 42) and plate springs (44, 46), both sides of the sealing parts (40, 42) being separable from the housing body of the housing (2).

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4. The engine as set forth in claim 1, further comprising oil seals (74) arranged around the intake/exhaust ports (14) formed at the operating chambers (8) of the rotary member (6), respectively.

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5. The engine as set forth in claim 1, wherein each of the shutoff valves (16) for opening or closing the intake/exhaust ports (14) of the rotary member (6) comprises: a rod-shaped body; a passage (64) formed at one side of the rod-shaped body; and guide rods (66, 68) eccentrically formed at both ends of the rod-shaped body.

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6. The engine as set forth in claim 1, wherein the  
pistons (12) are constructed such that guide rollers of  
guiding pieces (10) connected to shaft rods (58) of the  
5 pistons (12) contact the sidewall of an elliptical guide  
groove (48) formed at the housing (2).

7. (cancelled)

10 8. The engine as set forth in claim 1, wherein the  
operating chambers (80) of the rotary member (60) have air-  
supplying channels (22) that can be opened or closed by  
shutoff valves (20), respectively.

15 9. The engine as set forth in claim 8, wherein each of  
the shutoff valves (20) for opening or closing the air-  
supplying channels (22) comprises: a passage (91) formed at  
one side of a rod-shaped body thereof; and guide rods (92,  
94) eccentrically formed at both ends of the rod-shaped  
20 body, the guide rods (92, 94) being engaged in a guide groove  
(52) formed at the housing (2).

AMENDED SHEET (ART. 34)